

Fig. 8a/b: Surface Flux Comparisons

- Compare station surface LW and SW fluxes with SRBAVG monthly Model B (all-sky) LPSA/LPLA (Gupta model) fluxes
- Monthly site surface fluxes from CAVE
 - ARM, SURFRAD, CMDL, and BSRN quality controlled surface radiometer networks
 - 3 years of monthly fluxes per station (Mar00 to Feb03)
 - 32 stations across the globe
- LPLA Longwave all-sky fluxes
 - Surface longwave fluxes are independent from TOA
 - GEOS atmospheric state vertical profiles
 - GEO/MODIS (low) cloud base heights
- LPSA shortwave all-sky fluxes
 - SW TOA major component
 - Cloud Amount
 - Cloud optical depth

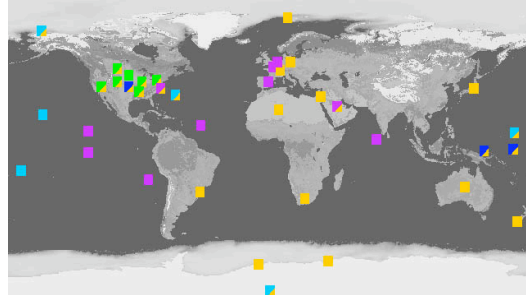


Fig. 8c: Monthly Mean Surface Downwelling Flux Comparisons

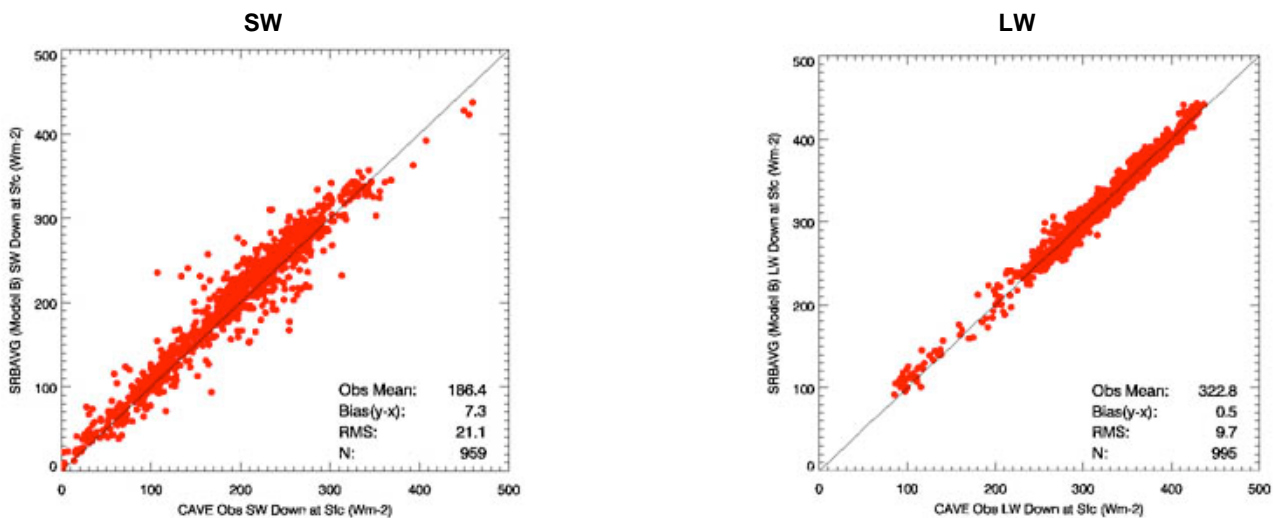


Fig 8d: Summary of Surface Flux Comparison

- The monthly SRBAVG surface (Model B) regional and ground fluxes are within the bias and RMS errors derived from instantaneous CERES footprint Model B (SOFA) and ground fluxes
 - 30 station result
- Some surface stations (a point) may not be representative of the 1° region, (coastal, terrain, etc.)

(%)	SW		LW	
	SOFA	SRBAVG	SOFA	SRBAVG
Bias	3.3	3.9	-0.6	0.2
RMS	15.0	11.3	7.4	3.0